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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,824	10/23/2003	Robert Burgermeister	CRD1061CIP2	6326
27777	7590	09/27/2006	EXAMINER	
PHILIP S. JOHNSON JOHNSON & JOHNSON ONE JOHNSON & JOHNSON PLAZA NEW BRUNSWICK, NJ 08933-7003			HOEKSTRA, JEFFREY GERBEN	
			ART UNIT	PAPER NUMBER
			3736	

DATE MAILED: 09/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/691,824	Applicant(s) BURGERMEISTER, ROBERT	
	Examiner Jeffrey G. Hoekstra	Art Unit 3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Notice of Amendment

1. In response to the amendment filed on 07/17/2006, amended claim(s) 1-3 and 12 is/are acknowledged. The current rejections of the claim(s) 1-18 is/are *withdrawn*. The following new and reiterated grounds of rejection are set forth:

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nashef et al (US 5,682,899) in view of Saul (US 2004/0068201 A1).

4. For claims 1-3, Nashef et al discloses an apparatus and method for evaluating body fluid flow rate through a medical conduit between first and second locations of said body comprising the steps of: (a) applying a plurality of temperature sensors 20,22 (column 3 lines 56-60) to said medical conduit for determining a body fluid flow rate; (b) applying an error correction temperature sensor, a thermistor, (column 3 lines 56-60 and column 15 lines 43-59); and (c) adjusting said determined flow rate in accordance with said error correction signal to provide a corrected flow rate (column 11 lines 55-67, column 12 lines 24-39, and column 15 lines 43-59).

5. For claims 4-7, Nashef et al discloses an apparatus and method for evaluating body fluid flow rate through a medical conduit between first and second locations of said body comprising the step of: cooling said bodily fluid via a heat transfer device 24 (column 3 lines 31-55), measuring a temperature value after said cooling via said plurality of temperature sensors, and associating a time and temperature with measured flow rate (column 11 lines 55-67 and column 15 lines 43-59).

6. For claims 9-12, Nashef et al discloses an apparatus and method for evaluating body fluid flow rate through a medical conduit between first and second locations of said body comprising the step of: measuring a temperature correction value using said error correction sensor comprising a background temperature value and determining the corrected flow rate accordingly (column 15 lines 43-59).

7. For claims 13-18, Nashef et al discloses an apparatus and method for evaluating body fluid flow rate through a medical conduit between first and second locations of said body comprising the step of: providing a frequency signal in accordance with said measured temperature value or temperature sensor resistance (column 12 lines 26-39), using a relaxation oscillator with an oscillation frequency dependent upon said temperature sensor resistance to provide said frequency signal, oscillator, determining a frequency oscillation value in accordance with a measured frequency of said frequency signal, providing said corrected CSF flow rate in accordance with said frequency value (column 10 lines 40-61).

8. Nashef et al discloses the claimed invention except for applying the plurality of sensors and an error correction sensor at locations external to the medical conduit.

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Saul teaches a medical conduit, specifically a CSF shunt, fluid flow measurement device comprising sensors comprising thermistors 402 located external to said CSF shunt (paragraphs 25, 26, and 53-56). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Nashef et al, with the externally disposed sensors as taught by Saul for the purpose of increasing patient safety during diagnostic procedures via decreasing invasive contaminants.

Response to Arguments

9. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

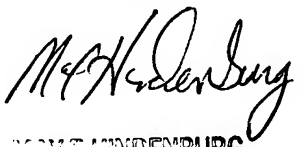
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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey G. Hoekstra whose telephone number is (571)272-7232. The examiner can normally be reached on Monday through Friday, 8:00 a.m. to 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max F. Hindenburg can be reached on (571)272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


MAX F. HINDENBURG
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